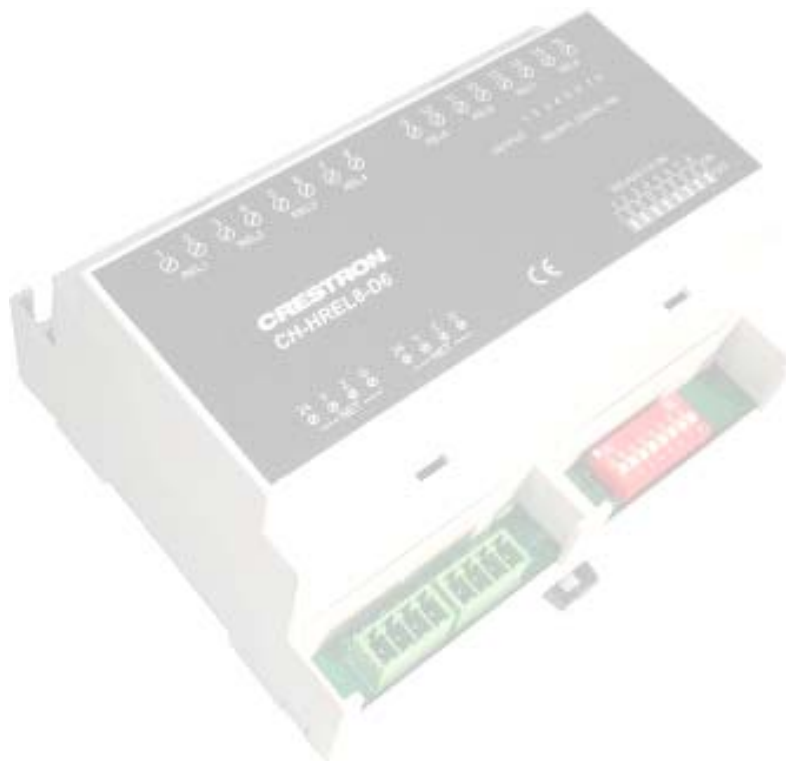


Crestron CH-HREL8-D6 Electrical Control Interface (DIN Rail)

Operation Guide



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Description



Figure 1: CH-HREL8-D6

Functional Description

The CH-HREL8-D6 is a Cresnet relay interface (Figure 1).

- 8 single pole single throw high voltage relays.
- Each relay can handle 16Amp at 250V and is protected with a VDR (385 Volts).
- Red LED feedback per relay + manual override per relay with dip switches.
- Interface connects directly to Cresnet. Two 4-pole Phoenix connectors on board for easy daisy-chaining of multiple interfaces. Cresnet addressing through software.
- DIN rail mountable universal casing to fit in any standard electrical cabinet. Takes 6 DIN modules in the cabinet.

Usage

Typical applications : Light switching
HVAC control
DIA – FILM projectors
A/V power control
....

!!! IMPORTANT!!!

Do NOT use the CH-HREL8-D6 for MOTOR control or other inductive loads.
Use the CH-HMOT2-D9 for these types of applications.

Technical data

Dimensions	:	106 x 90 x 58 mm (L x B x H)
DIN norm	:	6 Modules 106 mm, DIN43880
Cut-out size electrical cabinet	:	106 mm x 45 mm (L x H)
Weight	:	320 g
Color	:	Enclosure, grey RAL7035 , front black
Material	:	Self-extinguishing NORYL
Mounting	:	DIN rail DIN EN 50022
Connectors for relays	:	Phoenix 0.2 to 4mm ² cable section
Connectors Cresnet / Inputs	:	Mini Phoenix 3.5mm
Addressing Cresnet	:	through Crestron viewport or Toolbox
Power	:	24 VDC, Cresnet
Power consumption	:	max. 170mA
Cresnet Power factor	:	4W
Crestron Device Library	:	CNWM-LT9
Relays	:	8 single pole single throw highvoltage relays 250VAC / 16A (For RESISTIVE LOADS ONLY!!!) with VDR 385V protection per relay.
Status	:	1 blue LED for Power status 8 red LED's for Relay status
Test / Override	:	each relay has a separate override switch
Includes	:	Interface with 2x 4-pole Mini-Phoenix connectors

Front view

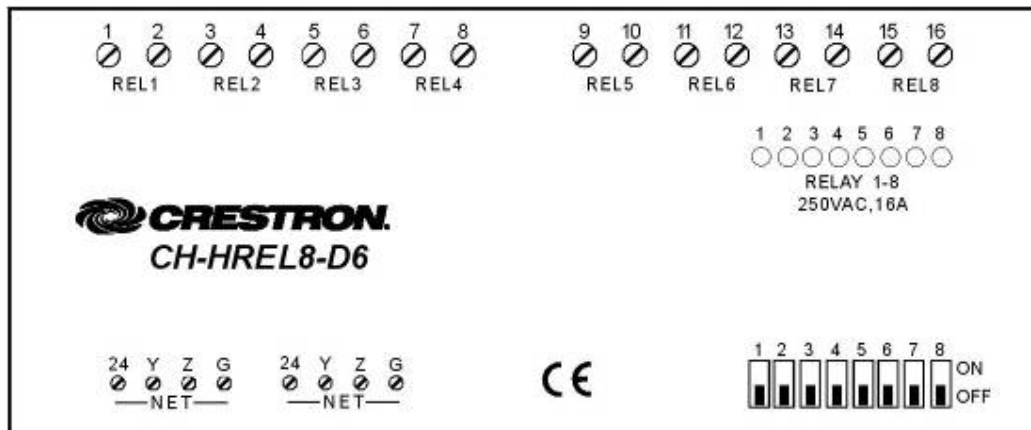


Figure 2: Front view CH-HREL8-D6

Setup

Example wiring diagram

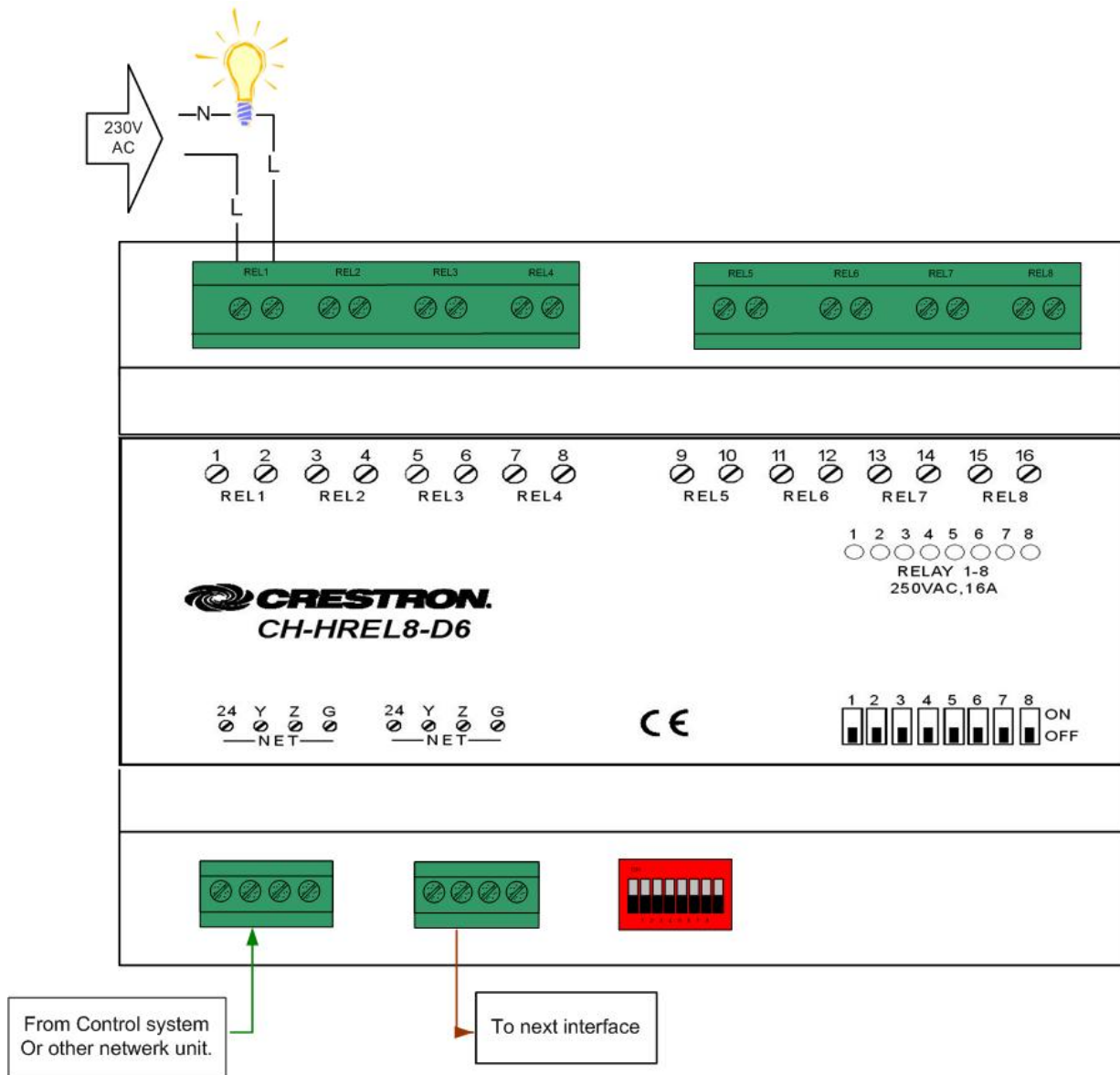


Figure 3: Connection diagram CH-HREL8-D6

Cresnet Connections

Note: Before making any connections, CRESTRON recommends that all power is off and the installer reviews the latest revision of the network interconnection drawing (DOC5411i).

Refer to figure 4 and connect the CH-HREL8-D6 to the Cresnet network via a Cresnet network cable (CRESNET cable). This cable is not supplied with the CH-HREL8-D6 but can be obtained from Creston International.

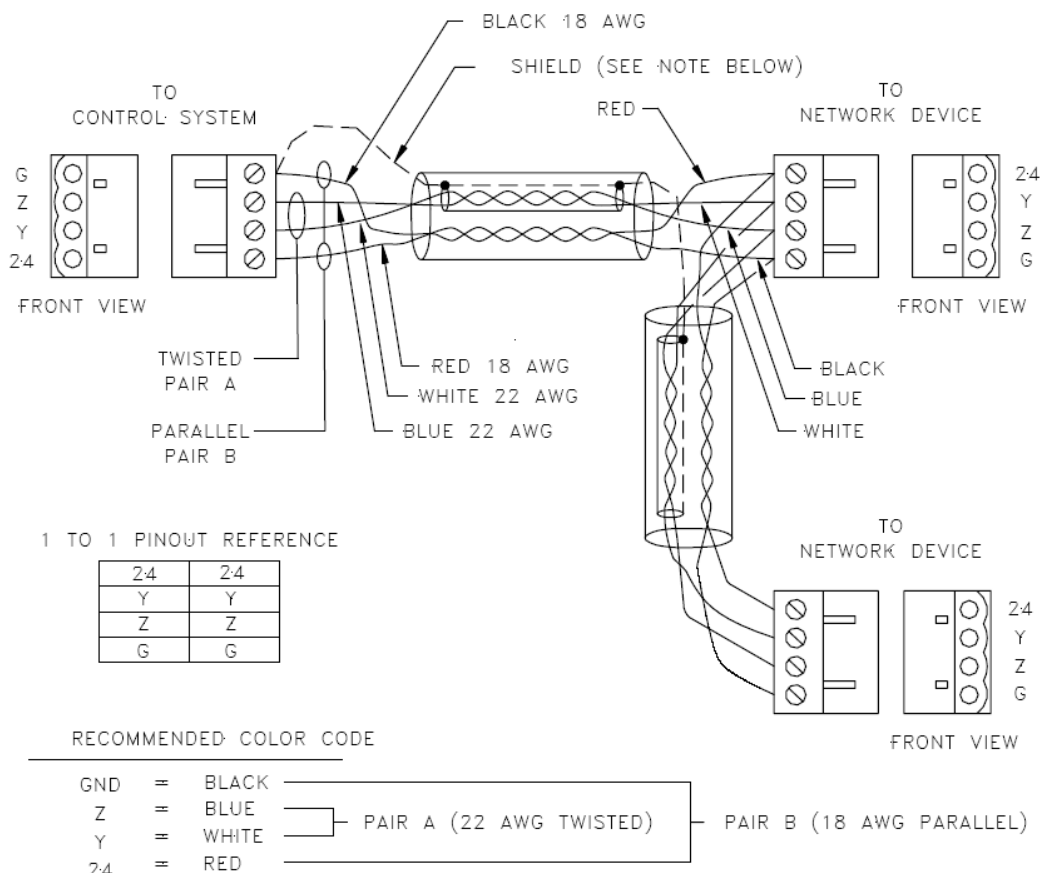


Figure 4: CH-REL8-D6, Cresnet Hook-up

Cresnet ID

Every equipment and user interface within the network requires a unique identity code (NET ID). These codes are recognized by a two-digit hexadecimal number from 03 to FE. The NET ID of each unit must match an ID code specified in the Simpl Windows program.

Use the following method's to change NET ID of the CH-HREL8-D6.

Method A: (Viewport)

1. Ensure that the CH-HREL8-D6 is connected to the control system.
2. Open the Crestron viewport and connect to the control system (RS-232 or IP)
3. From the viewport menu, select **Functions -> Set network ID**.
The software checks the network and then opens the "Set Network ID" window.
4. In the "Set Network ID" window, select the CNMW-LT9 from the *current network devices* text window (Figure 5).
5. Select the new NET ID for the CH-HREL8-D6 from the *choose the new network ID for the selected device (HEX)*: text box.
6. Click the Set ID to initiate the change. This will display the "ID command has been set" window.
7. In the "Command complete" window, click **OK**.
8. In the current network devices text window, verify the net NET ID code.
9. In the "Set network ID" window, click close.

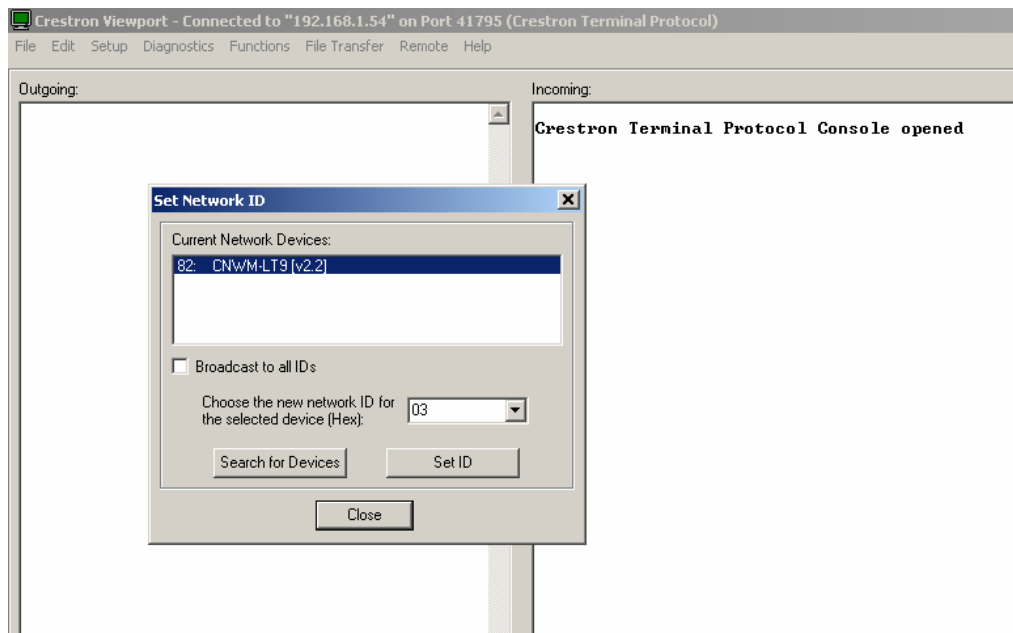


Figure 5: Set Network ID (viewport)

Method B: (Toolbox)

1. Ensure that the CH-HREL8-D6 is connected to the control system.
2. Open Crestron Toolbox and connect to the control system via
Tools -> Manage Address Book
3. After setting the correct parameters, click OK to return to the Crestron Toolbox main window.
4. Click **Tools | Network Device Tree**, or click the network device tree icon to display the “Network Device Tree” window (Figure 6). Use the Address Book icon or the drop-down list at the lower left of the window to select the appropriate address for the devices in the system. Communications are confirmed when the network devices are displayed.

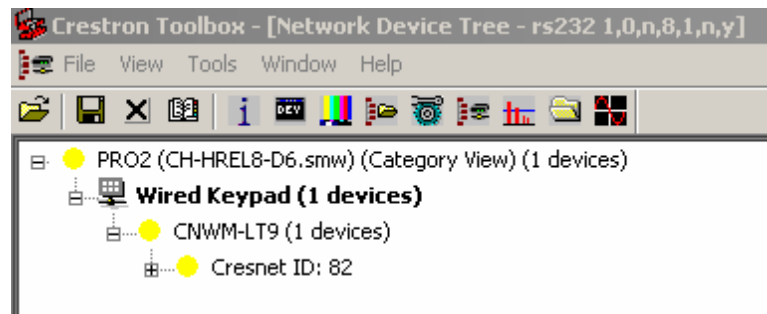


Figure 6: Network Device Tree (Toolbox)

5. To view a specific device, expand the network device tree by clicking +. Expand the network device tree until the device to be managed is selected. Right-click the desired NET ID to open the sub-menu.

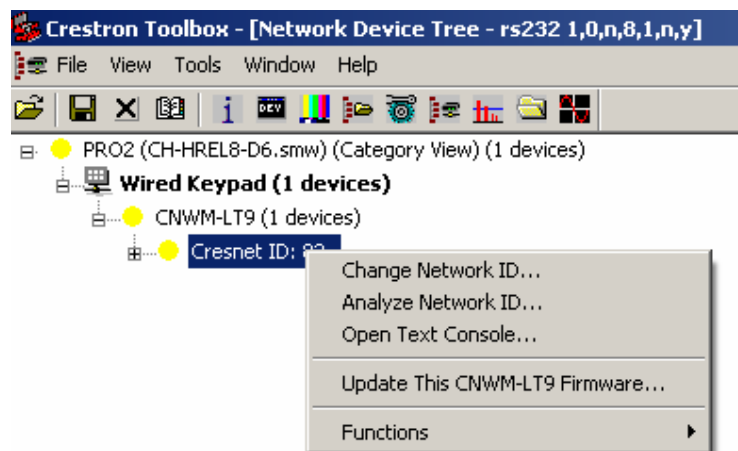


Figure 7: Change Network ID (Toolbox)

Programming

The next subsections describe a sample SIMPL Windows program that utilizes a CH-HREL8-D6. It provides a description of how to actually create the SIMPL Windows program.

NOTE: The following descriptions assume that the reader has knowledge of SIMPL Windows. If not, please refer to the extensive help information provided with the software.

Minimal software requirements

SIMPL Windows 2.01.06

Ops. for CNX: 5.12.63X/W

Ops. for "2" series: C2-1014.cuz

check website www.crestron.com for latest OPS and software versions

Configuration manager

A CH-HREL8-D6 needs to be defined as a **CNWM-LT9** in Simpl Windows (Figure 8).

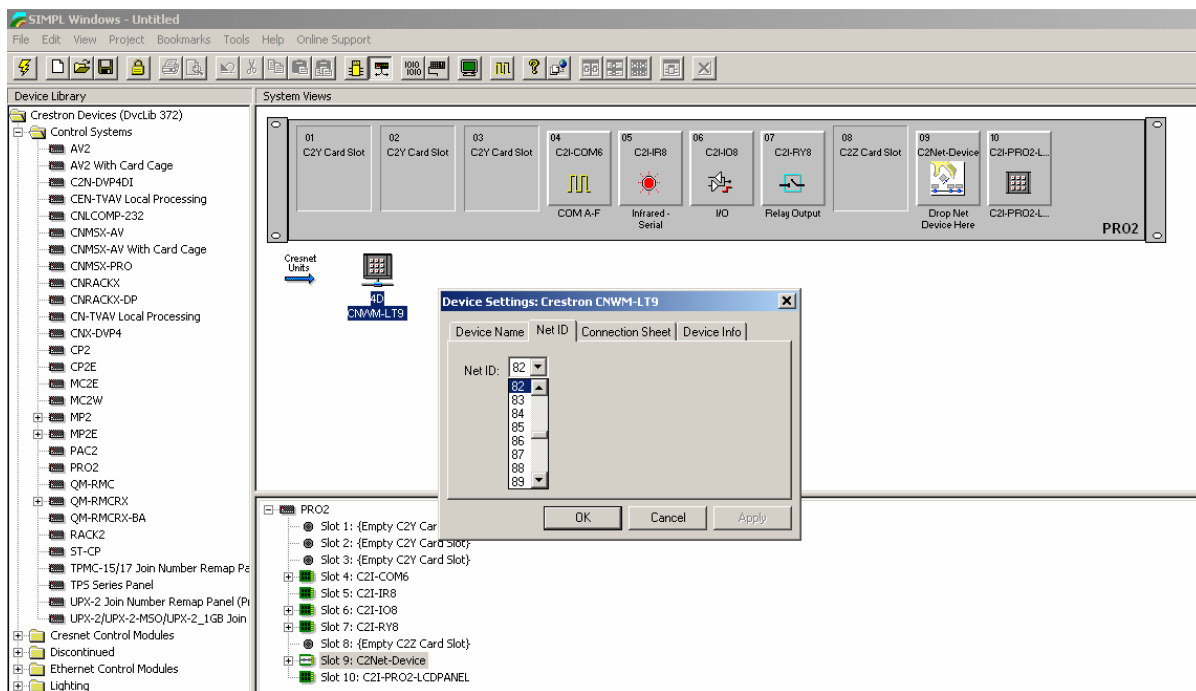


Figure 8: Hardware configuration

Programming manager

The CNWM-LT9 symbol has 9 digital press and 9 fb (feedback) signals (Figure 9).

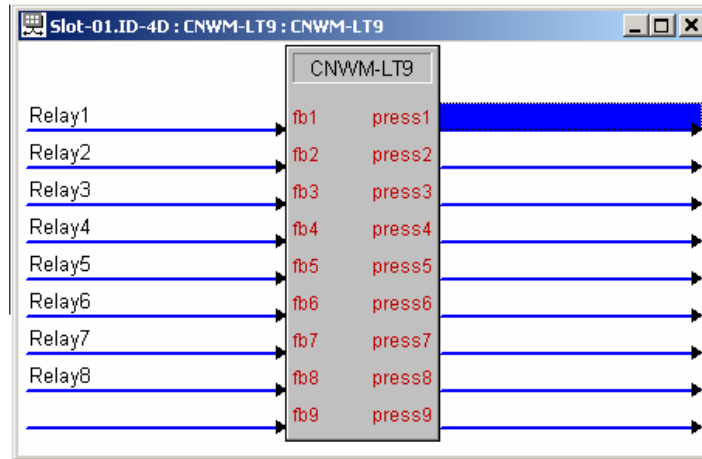


Figure 9: CNWM-LT9 symbol

*The first 8 fb signals (fb1-fb8) represent the 8 relays of the CH-HREL8-D6
The press signals (press1 – press9) are not used by the CH-HREL8-D6.

Example Program

Control a relay

This basic example illustrates how the first relay of a CH-HREL8-D6 can be controlled via a single press on a button located on a touchpanel or keypad. The toggle symbols keeps the relay open or closed (Figure 10).

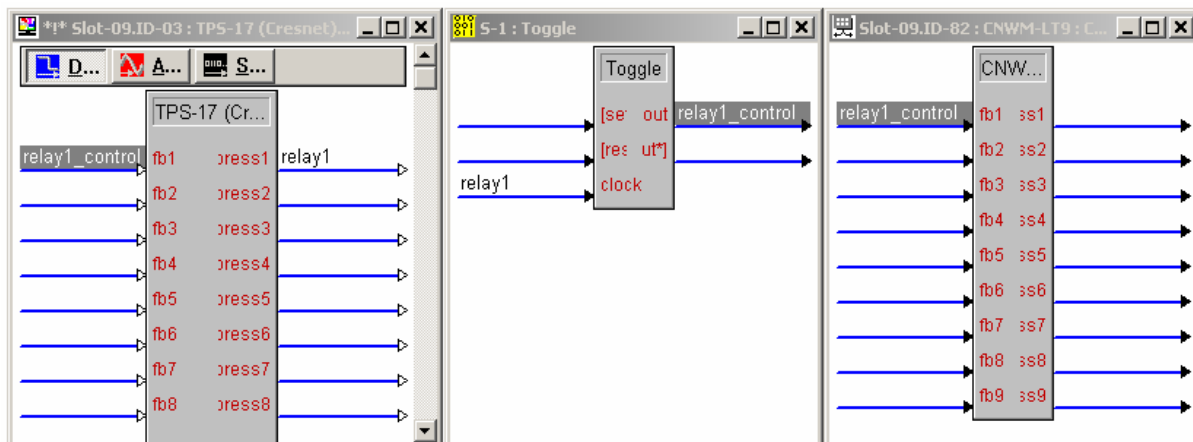


Figure 10: Example program

Problem Solving

Troubleshooting

Table 1 Provides corrective action for possible trouble situations.

If further assistance is required, please contact a Crestron Technical Support representative or submit your question on the Crestron True Blue On Line Service (www.crestron.com)

Table 1: Troubleshooting Guide

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
CH-HREL8-D6 does not function	CH-HREL8-D6 is not communicating to the network.	Enter Viewport in SIMPL Windows. Press the F4 key to poll the network. Verify network connection to CH-HREL-D6 (it will report as a CNWM-LT9).
Crestron swirl on the front is not lighting up (blue).	CH-HREL8-D6 is not receiving 24V power at the NET connector.	Verify "CRESNET Connections" on page 6. Confirm power is supplied to the unit.
Relay1-8 LED is always on, relay always closed, cannot be controlled by system.	Manual override dipswitches Relay 1-8 are placed to the ON position (up).	Verify that the dipswitches for all the relay's are placed to the OFF position (down).
Relay1-8 LED does not illuminate when control system sends commands	Relays 1-8 not driven by proper signals	Verify that the proper SIMPL symbols/signals are used to drive these relays.
CH-HREL8-D6 is not responding to network poll	Incorrect network wiring	Verify correct wirings to the network connectors.

Further Inquiries

If after reviewing this Operations Guide on the CH-HREL8-D6, you cannot locate specific information or have questions, please take advantage of Crestron's award winning customer service team by calling:

- In Europe, call Crestron International at +32-15-50-99-50.
- In the UK, call Crestron UK at +44-208.439.7272.
- In Germany, call Crestron Germany at +49-731.96.28.10.
- In France, call Crestron France at +33-1-47-91-00-00.
- In Spain, call Crestron Iberica at +34.952.76.82.33
- In the Benelux, call Crestron Benelux at +34-15-50-40-70.